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ANCYLIDAE FROM THE DEPARTMENT OF ANTIOQUIA – COLOMBIA, WITH NEW RECORDS (PULMONATA, BASOMMATOPHORA)

Ancylidae de Antioquia-Colombia, nuevos registros (Pulmonata, Basommatophora)

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ABSTRACT

In the department of Antioquia (Colombia) at 05°26´- 08°52´ North, 73°53´- 77°07´ West (Anonymous, 1996), between 0 – 2600 m of altitude, were collected molluscs of the Ancylidae family with hand nets. Shells and animals were studied and the samples are housed at the Malacological Collection of the University of the State of Rio de Janeiro (Col. Mol. UERJ) and at the Limnological Collection of the University of Antioquia (CLUA). In the department, *Ferrissia irrorata, Ferrissia* sp., *Gundlachia radiata* and *Uncancylus concentricus* were found. All them fits well with the typical species description except *Ferrissia* sp.

Key words. Ancylidae, Colombia, Freshwater mollusks, Pulmonata.

RESUMEN

Se colectaron moluscos de la familia Ancylidae en el departamento de Antioquia (Colombia) entre los 05°26´- 08°52´ Norte, 73°53´-77°07´ Oeste, en alturas comprendidas entre los 0 – 2600m (Anónimo, 1996). Los especímenes fueron recogidos con redes de mano y se estudiaron sus cuerpos y conchas. El material identificado se depositó en la colección Malacológica de la Universidad del Estado de Río de Janeiro (Col. Mol. UERJ) y en la Colección Limnológica de la Universidad de Antioquia (CLUA). Se encontraron en el departamento *Ferrissia irrorata, Ferrissia* sp., *Gundlachia radiata* y *Uncancylus concentricus*, los cuales corresponden con las descripciones típicas de las especies excepto *Ferrissia* sp.

Palabras clave. Ancylidae, Colombia, Moluscos agua dulce, Pulmonata.

Revision of literature data show scarce references of Ancylidae for Colombia. The first species cited was *Uncancylus concentricus* (d'Orbigny, 1835), described and figured as *Velletia fuhrmanni* by Piaget (1914) from Guaca, Antioquia Province. Wurtz (1951) listed *Hebetancylus culicoides* (d'Orbigny, 1835), a synonym of *U. concentricus* to Colombia probably based on previous data from d'Orbigny (1835) who had mentioned: *Hab. provincia Guayaquilensi (republica Colombiana)*. The second record is *Gundlachia radiata* (Guilding, 1828), cited by Lanzer (1996), without mentioning localities. Recent revision of material collected by the first author of this paper confirms these species to Colombia and the presence of, at least, two species of *Ferrissia* Walker, 1903.

All the studied material was collected in the department of Antioquia (Colombia) at 05°26´20´´-08°52´53´´ north latitude; 73°53´11´´-77°07´16´´ west longitude (Anonymous, 1996), between 0-2600 m of altitude. In each site, the organisms were collected with hand nets. Curatorial procedures was taken according Thiengo (1985). Shells and animals are studied according Basch (1963) and Santos (1995). Samples are housed at the Malacological Collection of the University of the State of Rio de Janeiro (Col. Mol. UERJ) and at the Limnological Collection of the University of Antioquia (CLUA). Examined material:

F. irrorata: COLOMBIA. **Antioquia**: San Pedro de los Milagros, Quebrada la Pulgarina, 2400 m, 14 dec 1998, *M. I. Gómez,* Col. Mol. UERJ 1586; COLOMBIA. **Antioquia**: Entrerríos, Río Chico, 2275 m, 20 feb 1999, *M. I. Gómez, A. Sierra*, Col. Mol. UERJ 1587; COLOMBIA. **Antioquia**: Entrerríos, Río Chico, 2275 m, 20 feb 1999, *M. I. Gómez, A. Sierra*, CLUA 71; COLOMBIA. **Antioquia**: Guarne, Quebrada el Zango, 2130 m, 8 jul 1999, *M. I. Gómez*, CLUA 124; COLOMBIA. **Antioquia**: Barbosa, Quebrada La Gloria, 1120 m, 17 feb 2000, *J. A Posada,* CLUA 231.

***Ferrissia* sp.:** COLOMBIA. **Antioquia**: Envigado, Quebrada la Ayurá, 1600 m, 10 dec 1998, *M. I. Gómez*, CLUA 15; COLOMBIA. **Antioquia**: San Pedro de los Milagros, Quebrada la Pulgarina, 2300 m, 14 dec 1998, *M. I. Gómez*, CLUA 27; COLOMBIA. **Antioquia**: Caucasia, Quebrada Palancas, 168 m, 31 jan 1999, *M. I. Gómez, A. Sierra*, CLUA 44; COLOMBIA. **Antioquia**: Venecia, Quebrada la Rita, 1470 m, 15 feb 1999, *M. I. Gómez, A. Sierra*, CLUA 60; COLOMBIA. **Antioquia**: El Peñol, Embalse el Peñol-Guatapé, 1815 m, 08 sep 1999, *M. I. Gómez*, CLUA 163.

G. radiata: COLOMBIA. **Antioquia**: Caucasia, Quebrada Tigre, 168 m, 31 jan 1999, *M.I. Gómez, A. Sierra*, Col Mol. UERJ 1589; COLOMBIA. **Antioquia**: Caucasia, Quebrada Tigre, 168 m, 31 jan 1999, *M.I. Gómez, A. Sierra*, Col Mol. UERJ 1588; COLOMBIA. **Antioquia**: Caucasia, Quebrada Palancas, 165 m, 31 jan 1999, *M.I. Gómez, A. Sierra*, CLUA 49a; COLOMBIA. **Antioquia**: Santa Fé de Antioquia, Quebrada la Aurrá, 630 m, 07 feb 1999, *M.I. Gómez, A. Sierra*, CLUA 51; COLOMBIA. **Antioquia**: San Juan de Urabá, Ciénaga Balandra, 10 m, 22 sep 2000, *J.A.Posada*, CLUA 232.

U. concentricus: COLOMBIA. **Antioquia**: Venecia, Quebrada La Tigra, 1345 m, 15 feb 1999, *M.I. Gómez*, Col. Mol UERJ 1590; COLOMBIA. **Antioquia**: Caldas, Rio Medellín, 1460 m, 13 oct 1998, *M.I. Gómez, A. Sierra*, Col. Mol UERJ 1591; COLOMBIA. **Antioquia**: El Carmen de Víboral, Quebrada La Aldana, 2095 m, 8 jul 1999, *M.I. Gómez, A. Sierra,* Col. Mol UERJ 1592; COLOMBIA. **Antioquia**: Jardín, Quebrada Linda, 1580 m, 6 sep 1999, *M.I. Gómez,* Col. Mol UERJ 1593; COLOMBIA. **Antioquia**: Caucasia, Río Man, 195 m, 30 jan 1999, *M.I. Gómez, A. Sierra*, CLUA 41; COLOMBIA. **Antioquia**: Amagá, Quebrada La Maní, 1485 m, 15 feb 1999, *M.I. Gómez, A. Sierra*, CLUA 58; COLOMBIA. **Antioquia**: Cocorná, Rio Cocorná, 14 sep 1994, *J.C. Jaramillo*, CLUA 94; COLOMBIA. **Antioquia**: Marinilla, Quebrada la Bolsa, 2105 m, 8 jul 1999, *M.I. Gómez*, CLUA 113; COLOMBIA. **Antioquia**: Rionegro, Río Negro, 2100 m, 8 jul 1999, *M.I. Gómez*, CLUA 119; COLOMBIA. **Antioquia**: Andes, Río San Juan, 1150 m, 6 sep 1999, *M.I. Gómez*, CLUA 141; COLOMBIA. **Antioquia**: Andes, Río Tapartó, 1100 m, 6 sep 1999, *M.I. Gómez*, CLUA 147; COLOMBIA. **Antioquia**: Marinilla, Quebrada el Chocho, 1990 m, 8 sep 1999, *M.I. Gómez*, CLUA 151; COLOMBIA. **Antioquia**: El Retiro, Represa La Fé, 2000 m, 12 sep 1999, *M.I. Gómez*, CLUA 179; COLOMBIA. **Antioquia**: Caucasia, Ciénaga del Río Man, 15 m, 23 mar 2000, *J.A.Posada*, CLUA 223; COLOMBIA. **Antioquia**: Necoclí, Ciénaga la Marimonda, 10 m, 12 mar 2000, *J.A. Posada*, CLUA 228; COLOMBIA. **Antioquia**: Chigorodó, Quebrada el Venado, 35 m, 13 mar 2000, *J.A. Posada*, CLUA 229; COLOMBIA. **Antioquia**: San Juan de Urabá, Ciénaga Balandra, 10 m, 22 sep 2000, *J.A. Posada*, CLUA 230.

The examined specimens of *F. irrorata* are characterized by the shell with elliptical aperture straight at the posterior portion; a blunt apex in the posterior third of the shell and to the right of the medium line; apical micro sculpture represented by an apical depression and well marked radial lines crossed by ridges; teleoconch with numerous concentric ridges and also rare irregularly placed low and delicate radial lines (fig 1). The muscle scars corresponds exactly to that figured by Harrison (1983), with the posterior one roundish and the two anterior elliptical. *Ferrissia* sp differs from *F. irrorata* by the shell more elevated, the aperture regularly elliptical, the blunt apex situated almost centrally; the apical microsculpture is more delicate; it is not possible to see the ridges crossing the radial lines, at the light microscope, even at great magnification (fig. 2). Animals were not examined.

Colombian specimens of *G. radiata* fits well the species characteristics, with a moderately elevated shell with a rounded apex a little projected, flexed to the right and not overhanging the right border of the shell; protoconch with shallow apical depression surrounded by a region without sculpture followed by a band of randomly distributed small pits; teleoconch with radial lines specially on the anterior region and near the border of the shell (fig. 3).
U. concentricus is characterized by the elliptical shell with an elevated and acute apex in the posterior third of the shell, right of the median line, pointing to right and directed to down. Apical micro sculpture represented by a band of very shallow pits near the margin of the protoconch; teleoconch with well marked concentric and radial lines; periostracal hairs are present (fig. 4).

According to Basch (1963) and Hubendick (1964, 1967) *Ferrissia* is the most complex genus of Ancylidae and probably the most wide spreading; occurring in Europe, Asia, Africa, Australia, and North, Central and South America (Pilsbry 1924, Basch 1963, Hubendick 1964, 1967, 1970, Brown 1980). *F. irrorata* was described to St. Vincent Island (Guilding 1828, Harrison 1983) and Puerto Rico (Harry & Hubendick 1964). These last authors also cited it to St. Croix, St. Lucia and Jamaica, based on museum specimens. The distribution range of *G. radiata* extends from the south of the United States to the north of South America (Basch 1963, Hubendick 1967) and Caribbean region and was referred for the first time for Colombia by Lanzer (1996). Related to *U. concentricus*, its distribution range came from Costa Rica (Pilsbry 1924) to Argentina (Hylton-Scott 1963), being registered to Equador (d'Orbigny 1835, Lanzer 1996), Peru (Lanzer 1996), Venezuela (Hubendick 1967), Brazil (Haas 1949a, 1949b, 1952, Irmler 1975) and now the present records confirms these species for Colombia.

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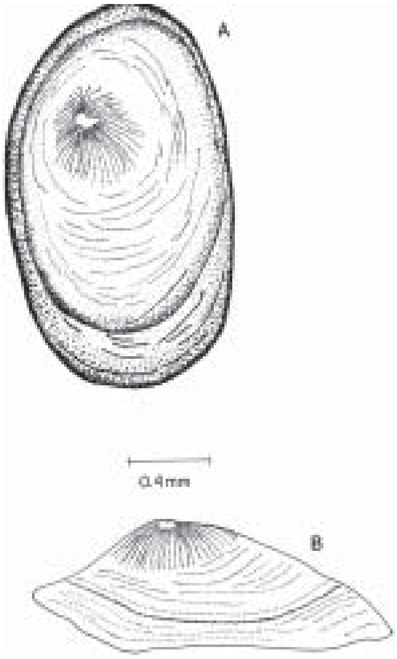

Fig. 1. *Ferrissia irrorata*. A. Upper view; B. Lateral view.

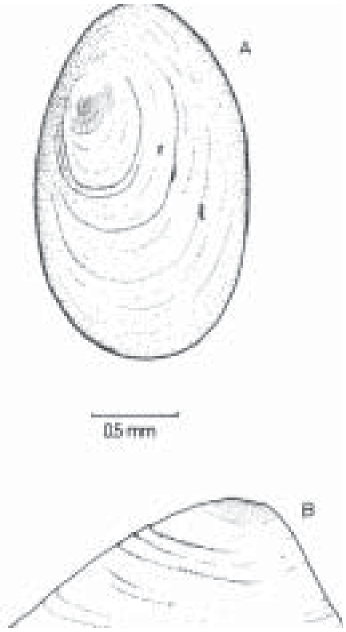

Fig. 2. *Ferrissia* sp. A. Upper view; B. Lateral view.

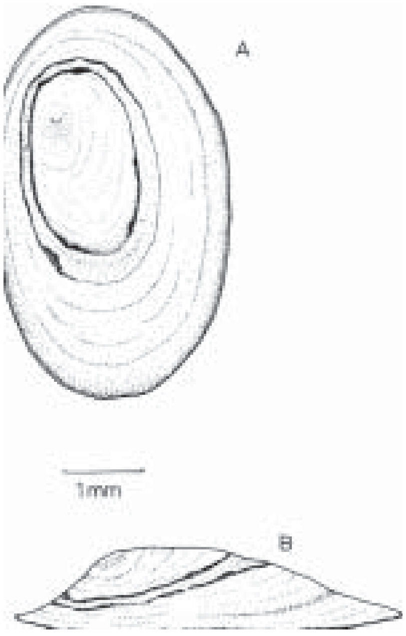

Fig. 3. *Gundlachia radiata*. A. Upper view; B. Lateral view.

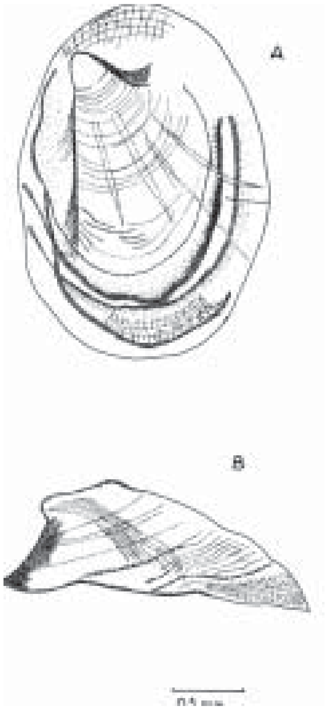

Fig. 4. *Uncancylus concentricus*. A. Upper view; B. Lateral view.

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